## Practical manufacturing seminar for social contribution

Supervisors: Prof. H. Nakase, Assoc. Prof. H.Nakamura Location: Innovation Plaza

For the services and products required by society, we will provide practical project based learning(PBL) program from discovering needs to creating prototypes, in cooperation with the Mitsubishi Fuso Practical Education Program. By group working, research required services/products, clarify the issues to realize the services/products, and realize prototypes of services/products.

As an example, in order to help prevent the spread of the new coronavirus (COVID-19) infection, we will hear opinions from university hospitals and local medical institutions and clarify the services and products required in the medical field. Provide prototypes to medical institutions and obtain feedback from questionnaires to improve services and products.



Prototype example: Face Shield for COVID-19 anti-infectious

## Skills learning in the seminar

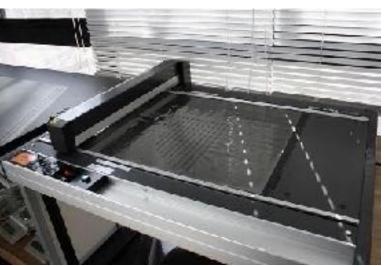
- · 2D & 3D computer aided design
- Manufacturing using digital equipment
- Selection and purchase of materials
- Collect and analyze user's requirements
- · Group working for original idea creation
- Project management

In the case of Tohoku University BCP level 1: Number of manufacturing will be limited less than 3 persons.

In the case of Tohoku University BCP level 2 and more: Student will try idea creation and 2D/3D design. Manufacturing will be carried out by university's staff.



Laser cutter



Cutting plotter



3D printer